REL SOUTHWEST Regional Educational Laboratory Southwest

REL Southwest Ask A REL Response

Rural

September 2021

Question:

To what extent do rural teachers have access to instructional coaching? What are ways to increase access, and with what sort of influence on teacher or student outcomes?

Response:

Thank you for the questions you submitted to our REL Reference Desk. We have prepared the following memo with research references to help answer your questions. For each reference, we provide an abstract, excerpt, or summary written by the study's author or publisher. Following an established Regional Educational Laboratory (REL) Southwest research protocol, we conducted a search for research reports as well as descriptive study articles on access and ways to increase access to instructional coaching in rural areas, as well as resources on the influence of instructional coaching on teacher or student outcomes in rural areas.

We have not evaluated the quality of references and the resources provided in this response. We offer them only for your reference. Also, we searched the references in the response from the most commonly used resources of research, but they are not comprehensive, and other relevant references and resources may exist. References provided are listed in sections with sources in each section in alphabetical order, not necessarily in order of relevance. We do not include sources that are not freely available to the requestor.

Research References

Rural teachers' access to instructional coaching

Akiba, M. (2012). Professional learning activities in context: A statewide survey of middle school mathematics teachers. *Education Policy Analysis Archives, 20*(14), 1–36. http://eric.ed.gov/?id=EJ971429

From the ERIC abstract: "Based on a statewide survey of professional learning activities among 577 middle school mathematics teachers in Missouri, this study examined two questions: 1) What professional learning activities do middle school math teachers participate in and how much time do they spend in these activities?, and 2) How are

teacher qualifications and contextual characteristics associated with the amount of their professional learning activities? The study examined seven types of formal and informal professional learning activities: 1) professional development programs, 2) teacher collaboration, 3) university courses, 4) professional conferences, 5) mentoring/coaching, 6) informal communications, and 7) individual learning activities. The study found that middle school mathematics teachers spend the greatest amount of time involved in teacher collaboration, professional development programs, and individual learning activities. In addition, mathematics teachers in high-poverty and ethnically diverse districts tend to spend more time in formal learning activities such as professional development programs, teacher collaboration, and mentoring/coaching than do mathematics teachers in wealthier and less diverse districts. To promote a greater level of teachers' participation in shared learning activities, it is important for district and school administrators to offer professional learning activities that meet mathematics teachers' learning needs for understanding students' mathematical knowledge and thinking."

REL Southwest note: The results describe variation in coaching as a function of district size (number of students), which is a characteristic that is highly correlated to district location.

Peltola, P., Haynes, E., Clymer, L., McMillan, A., & Williams, H. (2017*). Opportunities for teacher professional development in Oklahoma rural and nonrural schools* (REL 2017–273). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. https://eric.ed.gov/?id=ED575846

From the ERIC abstract: "The purpose of this study was to fill the gap in statewide information about teacher professional development opportunities in Oklahoma and compare the opportunities in rural and nonrural schools. The Regional Educational Laboratory Southwest, along with members of the Oklahoma Rural Schools Research Alliance, developed a survey that measured how professional development is structured, how it is planned, and what supports and barriers teachers may face in accessing professional development. The sampling frame was obtained from the website of the Oklahoma State Department of Education. Principals from 1,609 public elementary and secondary schools in Oklahoma were invited to participate in the online universe survey. The Office of Educational Quality and Accountability administered the survey in spring 2016, and 51.3 percent of the principals completed the survey. A nonresponse bias analysis was conducted, and nonresponse weights were created. All the results were adjusted by the nonresponse weights. In the descriptive results, Oklahoma schools are divided into rural versus nonrural schools using the urban-centric locale classification in the 2013/14 Common Core Data. The results report differences between rural and nonrural schools if they are significant at the $p < 0.05$ level based on a t-test and if the difference is at least 5 percentage points. Results indicate that the majority of rural schools in Oklahoma offer multiple types of professional development structures for teachers, such as conferences and workshops. However, rural schools offer fewer types than do nonrural schools. The biggest barrier that keeps both rural and nonrural teachers from attending any type of professional development is scheduling conflicts with other school or professional activities, and the barrier is more prevalent for rural teachers. The

findings of this study show that rural schools provide a substantial amount of support for their teachers' professional development, but the support is less likely in rural schools than in nonrural schools to be provided by peers (e.g., common planning and collaboration time, teacher-led coaching and mentoring, and collaborative learning). Rural schools could look for ways to increase collaborative learning between teachers so that teachers can support and mentor each other. Taking greater advantage of online resources could help rural schools supplement local, in-person professional development." [This report was produced in collaboration with the Oklahoma Rural Schools Research Alliance.]

Strategies for increasing access to instructional coaches in rural areas

Courtney, M. B. (2020). Coaching for continuous improvement. *Rural Educator, 41*(2), 55–63. https://eric.ed.gov/?id=EJ1277640

From the ERIC abstract: "Since 2015, the Kentucky Department of Education (KDE) has provided schools across the state with access to highly skilled instructional coaches. Primarily working in rural settings, these coaches provide a voluntary, integrated coaching model that focuses on building sustainable systems. Coaches provide a range of services, including systems design, strategic planning support, whole-team professional learning, professional learning community (PLC) facilitation, and fidelity monitoring. This article describes the theory of action for KDE's Continuous Improvement Coaching program, presents two case studies of rural elementary schools who utilized the program, and discusses the key features of the program and its relevance for rural schools."

Influence of instructional coaches on rural teacher or student outcomes

Mueller, T. G., & Brewer, R. D. (2013). Rethinking professional development in rural communities for students with autism spectrum disorder. *Rural Special Education Quarterly, 32*(3), 11–19. https://eric.ed.gov/?id=EJ1147772. Retrieved from: https://www.researchgate.net/publication/273141111

From the ERIC abstract: "In this manuscript the authors propose a professional development model for teachers of students with autism spectrum disorder who are served in rural communities. The components of this four-tiered model include: (a) education through ongoing workshops, (b) coaching, (c) parent information meetings, and (d) ongoing data collection. After implementing the model for 1 year in three school districts, the researchers conducted qualitative interviews with educators to explore their perceptions and experiences with the training model. Data analysis indicated coaching was one of the most beneficial aspects of this model. Teacher perceptions of the successes and challenges with the model are presented, along with implications for meeting the needs of students with autism spectrum disorder through professional development in rural communities."

Rush, L. S., & Young, S. (2011). Wyoming's instructional facilitator program: Teachers' beliefs about the impact of coaching on practice. *Rural Educator, 32*(2), 13–22. https://eric.ed.gov/?id=EJ987604

From the ERIC abstract: "In 2006, the Wyoming state government allocated monies for the Department of Education to fund the work of Instructional Facilitators, or coaches, in schools across the state (Wyoming Department of Education, 2008). In Spring 2009, after the program had been in place for two years, an ex-post facto study was designed to examine the impact of the program on teacher practice. An online survey was used to collect data from classroom teachers throughout Wyoming's public schools. Teachers answered questions about the extent of their work with Instructional Facilitators, the activities that they worked on with Instructional Facilitators, and the impact of their work with Instructional Facilitators on their practice. Results indicate that while a large number of teachers reported spending a small amount of time working with Instructional Facilitators, a small number of teachers reported spending a great deal of time working with Instructional Facilitators. Although differences by teaching level were apparent, the majority of respondents indicated they wished to continue working with an Instructional Facilitator and that Wyoming is spending its money wisely on the program. Discussion of these findings includes implications for Instructional Facilitator workloads and the need to focus their work on specific outcomes."

Additional Organizations to Consult

Center on Great Teachers and Leaders at the American Institutes for Research – http://www.gtlcenter.org/

From the website: "The GTL Center team stands ready to help your state and its districts build a diverse and talented educator workforce that is ready to support all of your students, especially those in underserved contexts. Our team of seasoned consultants and expert researchers is equipped with the knowledge, experience, and capacity to deliver a comprehensive set of services to meet your unique needs, from consultation to shoulder-to-shoulder support."

REL Southwest note: The publication *Teacher Observation, Feedback, and Support in the Time of COVID-19: Guidance for Virtual Learning*, which was written to help state education agencies seeking new ways to support teachers with more relevant forms of feedback, can be accessed here: https://gtlcenter.org/products-resources/teacher-observation-feedback-and-support-time-covid-19-guidance-virtual-learning

Learning Forward: *The Learning Professional* – https://learningforward.org/the-learning-professional/

From the website: "*The Learning Professional* (formerly JSD) is the flagship publication of Learning Forward. The magazine is published six times a year and is included in all categories of membership in Learning Forward. Learning Forward members are able to download all articles at no charge. A limited number of articles are available to the public. Issues can also be purchased in our online bookstore. Learning Forward is the only association focused solely on the most critical lever in improving schools—building the knowledge and skills of educators. Through the Standards for Professional Learning, Learning Forward leads the field in understanding what links professional learning to improved student achievement. We assist classroom, school, and system leaders in solving their toughest problems of practice."

REL Southwest note: *The Learning Professional* has two articles relevant to this request:

- Bouffard, S. (2020). A different kind of distance learning. *Learning Professional, 41*(4), 38–40. https://eric.ed.gov/?id=EJ1264324

  From the ERIC abstract: "Marcia Rock is one of the preeminent researchers on bug-in-ear coaching. In this method, an instructional coach watches a live video feed of a teacher's classroom and provides in-the-moment feedback via a wireless earpiece. The process, which is sometimes compared to a football coach communicating with a quarterback, is become increasingly feasible and popular thanks to ubiquitous videoconferencing and mobile technology. Rock spoke with 'The Learning Professional' to share insights and advice based on her research."

- Carson, C. D., Callard, C., Gillespie, R., Choppin, J., & Amadour, J. M. (2019). Bridging the distance: One-on-one video coaching supports rural teachers. *Learning Professional, 40*(6), 66–67, 69–70. https://eric.ed.gov/?id=EJ1237880. Retrieved from https://learningforward.org/wp-content/uploads/2019/12/bridging-the-distance.pdf

  From the ERIC abstract: "Coaching is an increasingly popular and promising method of professional learning, but unfortunately, many teachers do not have access to high-quality coaching due to geographic and financial constraints. Technology offers an opportunity to increase access to coaching, especially for educators in isolated rural areas. Research shows video is useful in teacher education and professional learning to focus on moments of practice. Recognizing the potential of technology for coaching in the rural areas where they work, the authors of this article developed an online coaching model in a joint venture between the University of Rochester (New York) and the University of Idaho, with funding from the National Science Foundation. Their goal is to expand their online coaching program to reach more teachers in rural settings, as well as urban and suburban districts."

Methods

Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

- [(instructional coaching) AND (access) AND (rural)]
- [(instructional coaching) AND (access) AND (rural schools)]
- [(instructional coaching) AND (impact) AND (rural)]
- [(instructional coaching) AND (impact) AND (rural schools)]
- [(instructional coaching) AND (effectiveness) AND (rural)]
- [(instructional coaching) AND (academic achievement) AND (rural)]
- [(instructional coaching) AND ("improve" OR "increase" access) AND (rural)]
- instructional coaching and rural areas
- ("instructional coaching") AND ("rural") AND ("student outcomes" OR "student achievement")
- distance instructional coaching
- rural instructional coaching

Databases and Resources

We searched ERIC for relevant, peer-reviewed research references. ERIC is a free online library of more than 1.8 million citations of education research sponsored by the Institute of Education Sciences (IES). Additionally, we searched the What Works Clearinghouse.

Reference Search and Selection Criteria

When we were searching and reviewing resources, we considered the following criteria:

- *Date of the publication:* References and resources published from 2007 to present were included in the search and review.
- *Search priorities of reference sources:* Search priority is given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, academic databases, including ERIC, EBSCO databases, JSTOR database, PsychInfo, PsychArticle, and Google Scholar.
- *Methodology:* The following methodological priorities/considerations were given in the review and selection of the references: (a) study types—randomized control trials, quasi-experiments, correlational studies, descriptive data analyses, literature reviews, mixed methods analyses, and so forth; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected, and so forth), study duration, and so forth; and (c) limitations, generalizability of the findings and conclusions, and so forth.

This memorandum is one in a series of quick-turnaround responses to specific questions posed by stakeholders in the Southwest Region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), which is served by the Regional Educational Laboratory (REL) Southwest at AIR. This memorandum was prepared by REL Southwest under a contract with the U.S. Department of Education's Institute of Education Sciences (IES), Contract ED-IES-91990018C0002, administered by AIR. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.